

REMARKS

In response to the office action dated March 22, 2007, applicant has amended claim 20 and 21 in order to overcome Claim objections and rejections:

1. Claim 20 has been amended to include "wherein said second blade and said fifth blade . . . "
2. Claim 21 has been amended to overcome 35 USC §112, 2nd Para. rejections and antecedent basis rejections.

Claims 17-22 were rejected by the examiner under 103(a) as being unpatentable over *Stoynoff, Jr.*, US Pat.# 5,682,784 (the '784 patent), in view of allegedly Admitted Prior art (APA). Specifically, the examiner stated that '784 disclosed a tooling assembly while also alleging that Applicant's specification (Pages 4 & 5) discloses the exceptions.

In response to this rejection, applicant states that Specification Pages 4 & 5 only disclose: (1) a tooling assembly utilizing only steel blades; and (2) a tooling assembly utilizing only carbide blades in order to form rigid blades that are less resistant to wear. (Background of the invention, Page 4) Neither the '784 patent nor other prior art referenced discloses applicant's invention of a tooling assembly that utilizes a plurality of steel blades and a plurality carbide blades within the single tooling assembly. (Detailed description of the invention, Page 9) This combination is important because the selective incorporation of a steel blade with a carbide blade reduces flex in the assembly blades while protecting the carbide blades (Pages 9-10), as well as reducing the wear associated with the steel blades. (Page 10) The reduction

of flex is primarily due to the fact that carbide is more rigid than steel (Page 5), and this reduction in flex reduces the wear on the tooling assembly that is associated with an "all steel" type blade assembly (Page 5). Moreover, utilizing only carbide in a tooling assembly has its drawbacks as it can easily shatter or damage due to becoming brittle. (page 5) Combining the carbide and steel has advantages because the carbide blade will continue to cut or form the sheet metal even though its opposite steel pair is substantially dull or broken. (Page 11) This is possible since the relative flex resistant nature of the carbide blade, permits it to be paired with a respective cutting blade having a flat edge and still allow it to slide and frictionally engage the flat edge, thereby performing the forming or cutting job for which both the carbide and steel blade was employed. (Page 12)

Furthermore, under a *Prima Facie* obviousness rejection, the claimed invention "as a whole" must have been obvious at that time to "a person of ordinary skill in the art". (MPEP 2142). Specifically, there must be some suggestion or motivation to modify the reference or to combine reference teachings, there must be a reasonable expectation of success, and the prior art reference (or references when combined) must teach or suggest all the claim limitations. *Id.*, and the burden rests with the USPTO to provide some suggestion of the desirability of doing what the inventor has done. *Id.* The '784 patent discloses a blade made of steel with serrated edges that is capable of supporting, cutting, rolling and forming the plain louvered fin, in order to solve the problem of a tool with a long life. (Col. 4, line 50-56) The strength of steel is used to overcome the problems associated with cutting and forming fins. (Col. 4, line 50-56)

However, steel can become dull and therefore affect cutting and forming. Finally, the prior art must suggest the desirability of combining a steel blade with another blade formed of a dissimilar metal, however, it is believed that *Stoyanoff, Jr.* lacks this motivation because *Stoyanoff Jr.* suggests that the sole problem of tool life can be solved by implementing a material such as steel having serrated blade edges. (Summary of the Invention). The motivation to implement all steel arises from a desire to address tool life, and there is no suggestion that addresses flexing which reduces life of the blades, as well as continuing to form and cut roll's even due to a dull blade. Therefore claim 17 which has this novel integrally formed steel and carbide tool assembly should be allowable as written.

Dependent claims 18, 19, 20 depend on allowable claim 17, and should be allowable as written. In light of the foregoing reasons, Claim 22 should also be allowable as written. If there are any further questions regarding this matter, please call the Applicants' undersigned Attorney at (248) 324-7787.

Respectfully submitted,

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